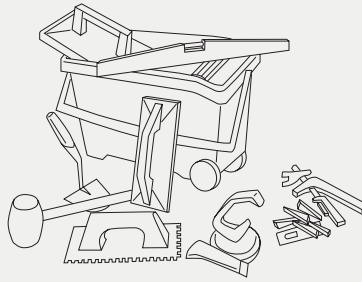


TILING INSTRUCTIONS [CERAMIC TILES]

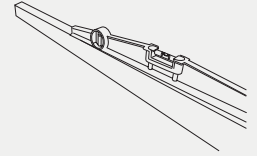
1

Laying ceramic tiles requires qualified personnel with proven experience and the appropriate tools and equipment: notched trowels, spacers, rubber mallets, suction lifters, rubber grout floats, sponges and grout buckets. Check the information on the packaging beforehand and follow the manufacturer's recommendations carefully. Avoid leaving loose tiles stacked together in the open for long periods of time.



2

Ensure that the surface you are going to tile is stable and that the substrate is suitable for laying the ceramic tiles: surface with a rough, non-breaking texture, perfectly level and flat. Waterproofing in damp areas is recommended.



3



The surface to be tiled should be completely free of dust or any other substance that could impair the bonding of the tiles. For specific tiling projects (radiant heating systems, façades with mechanical anchoring, roof tiles or resolution of particular project parameters), please request additional specific information for each situation.

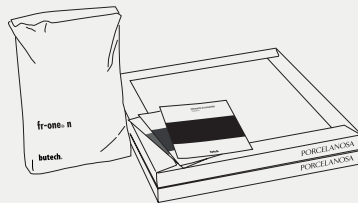
4



The working area must be lit sufficiently to easily detect any defects in the installation of the tile, particularly "lipping" between tiles. It is recommended to work with electric spotlights and a higher brightness than usual.

5

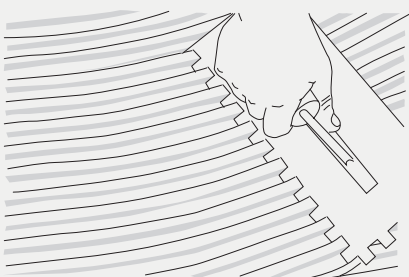
Choose the type of adhesive depending on the room and tile to be used. The choice of tile and adhesive are critical to the subsequent overall performance. The factors to be taken into account are: type of ceramic material, tile format, tile substrate and intended use (the traffic it will be subjected to, safety requirements against falls, etc.). In the PORCELANOSA catalogues, you will find references for the area of use and slip resistance, as well as the butech adhesive recommended for each model.



6

The only recommended laying system is the thin-bed method with a notched trowel. For tiles larger than 1,000 cm², back buttering is recommended, with the adhesive being applied to both the substrate and the back of the ceramic tile.

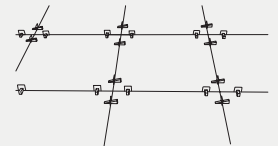
It is essential to remove any bonding material remaining on the surface of the tile before it sets, making sure to leave a clean joint to facilitate grouting. When cleaning, do not use metallic tools or blunt elements



that could damage the surface of the tiles.

7

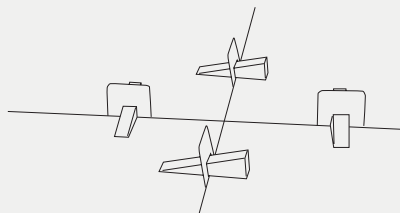
All ceramic tiles, especially rectified tiles, must be handled with the utmost care to avoid scratches, chips and dents. Before you start to lay the tiles, check that they are free from defects. Check the shade and calibre before laying the tile.



8

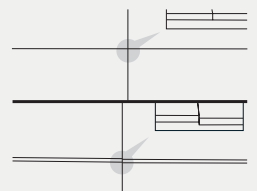
The joints between tiles should be at least 1.5 mm for indoors and 5 mm for outdoors. With staggered joints, offset tiles at 3/4 the length of the tile. The use of self-levelling spacers is recommended*.

* Before using the self-levelling spacers, test them on the type of floor or wall tile you are laying, and check you won't damage the tiles when breaking them off. This is especially important if you are working with relief tiles or non-bevelled rectified tiles. Consult the national tile installation standards and respect the minimum joint width indicated for the type of tile and installation to be carried out.



9

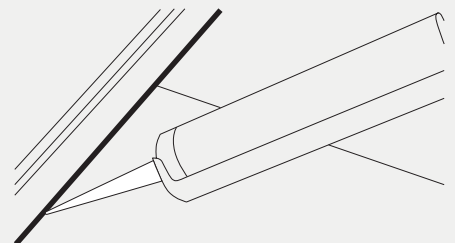
Always follow the manufacturer's guidelines when preparing and using adhesives. Do not apply the adhesive in a final thickness greater than that indicated on the bag, check the wetting capability of the adhesive and press the ceramic tile onto the bonding material



using a back and forth motion. Distribute the adhesive evenly beneath the tile. Uneven thicknesses can cause "lipping" defects due to differential shrinkage of the bonding material. When continuing tiling besides pre-existing ceramic tiles, estimate the possible shrinkage and choose a level to compensate for it.

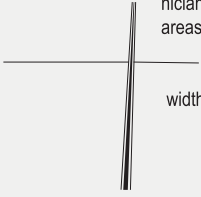
10

Perimeter joints need to be present at corners, changes of pavement plane and changes of material. Covering with the skirting board or the tile itself and sealing with an elastic putty is recommended. Minimum joint width: 8 mm.



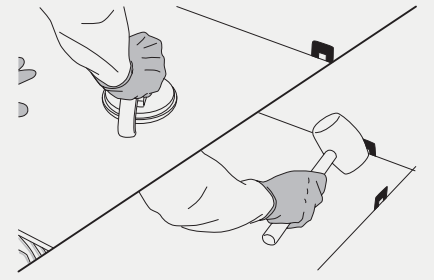
11

Respect structural joints. Install the movement joints according to the instructions of the site technician. In general, do not design areas larger than 50-70 m² indoors and half of that outdoors. Minimum joint width: 8 mm.



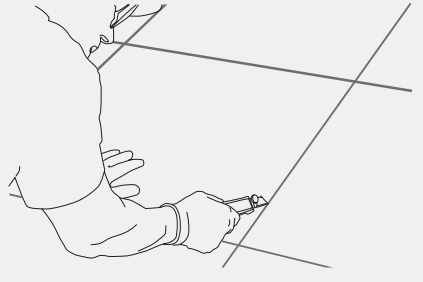
12

Both during the installation phase and before the end of the day, check the quality of the work carried out before the bonding material finishes setting, and correct any defects using suction cups and rubber mallets.



13

Before grouting, check that the bonding material has set. Remove the remains of the spacers, clean the joints over their entire length, width and depth, and lastly check that there is no moisture left inside the joint.



14

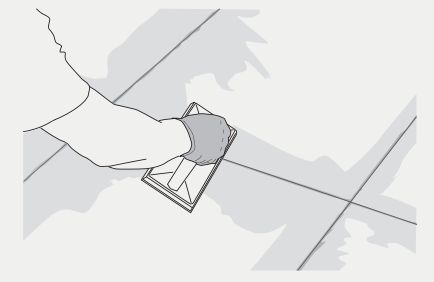
The joints must be grouted when the tiles are perfectly bonded to



the substrate. In the case of floor tiles, the adhesive manufacturer's recommendations should be followed in order to allow sufficient time before the tiles are walked on or subjected to any kind of load. This can prevent premature detachment or breakage.

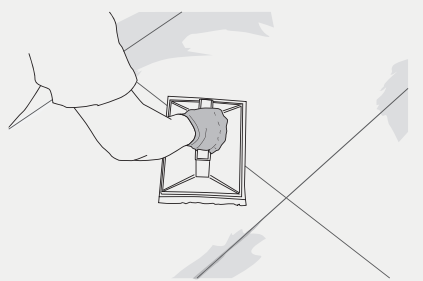
15

Always follow the manufacturer's guidelines when preparing and using sealing materials. Check that the material and selected tool do not damage the surface of the tile. The grout is applied using a grout float. In the PORCELANOSA catalogues, you will find the recommended butech material for each model.



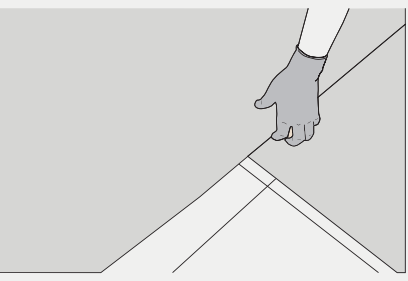
16

In wet areas, epoxy grout should be used and the joints with the bathtub or shower should be sealed using silicone to avoid water seepage causing absorption problems and potential changes in tone and expansion due to damp.



17

Protect the flooring against premature loads, other site work and adverse weather conditions. It is recommended that flooring be covered with sheets or panels to prevent the accumulation of dirt and to protect against scratches, abrasion and knocks.



18

When cleaning the area, use products that are compatible with the chemical resistance of the tiles. Avoid the use of solid detergents with abrasive particles and cleaning agents containing hydrofluoric acid (HF). This acid attacks the enamel and causes irreparable damage to the ceramic.

